EXECUTIVE ORDER U-R-067-0010 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2019	KMNBL09.0OR4	9.04	Diesel	8,000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION		
Char Diesel O	ectronic Direct Injection, ge Air Cooler, Electronic xidation Catalyst, Contin Selective Catalytic Redu Ammonia Oxidation (Control Module, uous Trap Oxidizer, ction-Urea,	Loader, Tractor, Harvester, Agricultural Equipment, Construction Equipment, Other Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxidnes of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
POWER			NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tion 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
130 2 KVV 2 360	Tier 4 Final	CERT	0.01	0.24		0.1	0.002			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 26th

1

day of June 2019.

Allen Lyons, Chief

Emissions Compliance, Automotive Regulations and Science Division

Attachment (261

Engine Model Summery Template

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			3. BHP@RPM	4. Fuel Rate mm³/stroke@peak HP	5. Fuel Rate (lbs/hr)@peak HP	6. Torque @ RPM	7. Fuel Rate mm³/stroke @	8. Fuel Rate (lbs/hr) @	9. Emission Control Device
Engine Family	1. Engine Code	2. Engine Model	(SAE Gross)	(for diesel only)	(for diesel only)	(SAE Gross)	peak torque	peak torque	Per SAE J1930
KMNBL09.00R4	D1556	LE121	305 kW @	207	130	1970 Nm @	264	118	ECM, DI, TO CTO
			1900 rpm			1350 rpm			CAC, BFF, DOC SCR-U, AMOX
KMNBL09.00R4	D1556	LE526	305 kW @	229	129	1970 Nm @	264	118	ECM, DI, TC
			1700 rpm			1350 rpm			CAC, PAF, DOC SCR-U, AMOX
KMNBL09.00R4	D1556	LE527	283 kW @	213	120	1850 Nm @	247	114	ECM, DI, TC
			1700 rpm			1400 rpm			CAC, DAF, DOC SCR-U, AMOX
KMNBL09.00R4	D1556	LE528	261 kW @	196	110	1750 Nm @	233	108	ECM, DI, TC
			1700 rpm			1400 rpm			CAC, MEF, DOC SCR-U, AMOX
KMNBL09.0OR4	D1556	LE529	239 kW @	179	100	1650 Nm @	219	98	ECM, DI, TC
			1700 rpm	•		1350 rpm			CAC, EF, DOC SCR-U, AMOX
KMNBL09.00R4	D1556	LE530	217 kW @ 1700 rpm	164	92	1550 Nm @ 1300	207	89	ECM, DI, TC CAC, DIF, DOC SCR-U, AMOX